

WHEAT.

CONSUMPTION AND PRICES FOR TWENTY-NINE YEARS.

THE PROSPECT FOR THE COMING YEAR.

To the Editor of The Tribune.
Sir: Now that the final reports of foreign commerce for the last fiscal and crop year have been made, and the preliminary report of wheat shipments in July, many long-disputed questions regarding the consumption of wheat can be definitely settled. It is important just now that they should be settled, because the enormous crop in this country and the failure of crops abroad are causing excitement in the market, and estimates that are apt to mislead many to their harm. At the same time the figures appear to settle such controversy as there has been regarding the correctness of my estimates for the past eleven years. The results prove that, instead of twisting facts to aid the bears in wheat, as some critics asserted, by representing the surplus as larger than it actually was, I have been all the time erring only on the side of caution, representing the surplus a little less than it actually was.

It is now known to everybody that, instead of the famine in wheat which some speculators have been predicting more than two years, the country had left on hand July 1 a large surplus after sending 215,000,000 bushels abroad within two years. The quantity in visible supply was 10,000,000 bushels larger than July 1, 1882, the quantity on the Pacific Coast in known stock was larger by several million bushels, the quantity in minor elevators and warehouses and in farmers' bins was larger, so that the receipts at western ports from the beginning of July were constantly large for the season, and the exports for that month almost wholly from the old stock amounted to 13,200,000 bushels, flour included. The stocks of flour on hand were also larger than usual. No candid person will now dispute that the quantity brought over July 1 from previous crops was fully 20,000,000 bushels in excess of the minimum stock carried over at the point of greatest exhaustion, July 1, 1882. This result corresponds exactly with my estimates six months ago, and again in April, when some people were buying wheat at \$12 in this market.

The official returns show that the exports, less imports, during the last fiscal year were 55,188,754 bushels wheat and 11,314,296 barrel flour, equal to 66,503,050 bushels wheat. Up to July 1 then in nine years from the point of greatest exhaustion there were exported 3,684,250,073 bushels wheat, flour included. The

quantity required for seed, as stated by the Agricultural Department for every year except the last, and reckoned at the same rate for the increased acreage reported by the Department for this year's crop, amounts to 481,477,936 bushels. The aggregate of the nine crops of 1882-1890 inclusive, as officially reported, was 4,014,384,530 bushels. Hence the quantity actually retained for home consumption or added to stock was 2,468,646,521 bushels, and of this quantity it is admitted that about 20,000,000 bushels were retained in excess of the stock held at the beginning of this era. This determines the quantity consumed with great exactness and certainty. To determine the consumption per capita, the population in different years must be considered.

Prior to the census returns I had estimated the increase of population, exclusive of immigration, at slightly less than the rate of the previous decade. So reckoning, and allowing a yearly consumption of 4.5 bushels per capita, I made the quantity consumed about 2,000,000 bushels per year larger than it actually was—a difference of 18,000,000 bushels in the distribution of 4,014,384,500 in the nine years. It was not a large error, all will admit, and it was on the safe side, leaving available for export a little less than the true quantity. Taking the census figures, we find that the increase yearly, exclusive of immigration, was but 1.35 per cent, and adding immigration each year and calculating for each year the mean population as the number actually supplied with food, we have for nine years a total mean population of 527,171,262. Dividing by this number the ascertained consumption, 2,448,646,521 bushels, there results a yearly consumption for the whole period of 4,644 bushels per capita, a shade less than the 4.2 bushels estimated by the Agricultural Department. If the population were as large as all statisticians supposed—even the Treasury official estimate, based on figures of Professor Elliot, placed it at \$4,500,000 a year before the census was taken—the mean population for the whole period would have been 591,057,923 bushels for five years, and the mean population within Treasury lines was 148,873,423, and the average consumption 4,024 bushels per capita. The two deficient crops of 1885 and 1886 brought hard times and an average of \$280 for wheat in May, 1887.

The next period of seven years ended in the July after the panic of 1873, and was one of prosperity and larger consumption. But prices were high at the beginning, and fell only to \$12 in May, 1870, after a large crop, rose to \$17.25 in May, 1872, with two slightly deficient crops, and declined to \$12.50 for May, 1874, after two crops so far short that the previous surplus was nearly exhausted. The quantity remaining for seven years, after deducting for exports and seed, was 1,151,015,254 bushels, and the mean population 274,213,915, and the average consumption 4,143 bushels per capita.

Reckoning the increase in population at 1.35 per cent, beside immigration, the number of inhabitants July 1, 1871, was 64,366,260, and the mean population for the new year just begun may be expected to be about 65,023,085. At the above rate the quantity required for consumption will be 302,000,000 bushels. It must not be forgotten that if prices are higher than usual consumption may fall below the ascertained average for a period of good years and bad. The quantity required for seed can only be guessed, for the farmers may largely increase the acreage if the price is

high. But even an increase of 5 per cent in acreage would only make the requirement for seed 67,500,000 bushels. Thus all home requirements fall below 360,000,000 bushels, while the surplus brought over, 20,000,000 bushels, and the new crop, now estimated according to Department reports at 544,000,000 bushels, aggregate 204,000,000 million bushels more. Apparently that quantity was available for export during the year ending next June. The largest quantity exported in any year hitherto has been about 186,000,000 bushels, but the European demand, notwithstanding much conflict of information, promises to be large enough to take all this country has to spare, provided the price is not so high as to cut down Europe's consumption.

The world has become accustomed to lower prices for wheat than were known until within a few years. Changes in methods and cost of transportation are the chief cause. Prior to 1880 the average price at New York for the first five months of the calendar year had never in modern times been as low as \$1 per bushel, but in six years ending with 1890 it was below that figure, and in 1890 it was 90 cents. There have been five periods of approximate exhaustion of supply within the past thirty years, and when prices are strong during the five months ending with May it usually indicates approaching exhaustion. Thus in the five years ending with May, 1867, the highest price in that month, in the first five months of the year, and the highest export price of flour were in 1867, notwithstanding the great inflation of general prices in 1864. The quantity remaining after deduction of exports and seed was 591,057,923 bushels for five years, and the mean population within Treasury lines was 148,873,423, and the average consumption 4,024 bushels per capita. The two deficient crops of 1865 and 1866 brought hard times and an average of \$280 for wheat in May, 1867.

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Prostration after the panic showed itself in slightly reduced consumption during the next three years, though the supply was so far exhausted that the average rose to \$1.00 for May, 1877. In view of increased facilities for transportation and reduction in charges, the farmers must be getting more for their wheat in actual cash than they did when specific payments were restored, and prices before

of exports and seed was 579,507,472 bushels, and the mean population 134,658,000.

Next followed a period of large crops, large foreign demand, great prosperity and increasing consumption, which was broken by the failure of the crop in 1881. The May average, which had fallen to \$1.05 in 1879, rose only to \$1.39 in 1882, though the exhaustion of supply was more complete than ever before or since. The quantity remaining for five years after deduction of exports and seed was 1,145,736,036, and the mean population 243,281,141, so that the average consumption was 4,614 bushels per capita.

Coming now to the latest period just closed, we find an increase of consumption to 4,644 bushels yearly for nine years, but with a remarkable depression in 1889. The lowest May average was in 1889, only \$1.00, and the lowest export price of flour was in 1887, \$1.00. The average consumption for this period has been already given. The surplus and the deficiency for each year, the average export price of flour, and the average price of wheat for the first five months of the year and for May are shown in the following table:

Year	Years	Year's	Year's	Expt.
avg.	avg.	avg.	avg.	avg.
1862-1871	10	18.45	\$1.19	\$1.31
1872-1881	10	18.45	1.09	1.02
1882-1891	10	18.45	1.00	1.00
1892-1899	8	18.45	1.00	1.00
1890-1899	10	18.45	1.00	1.00
1891-1899	9	18.45	1.00	1.00
1892-1899	8	18.45	1.00	1.00
1893-1899	7	18.45	1.00	1.00
1894-1899	6	18.45	1.00	1.00
1895-1899	5	18.45	1.00	1.00
1896-1899	4	18.45	1.00	1.00
1897-1899	3	18.45	1.00	1.00
1898-1899	2	18.45	1.00	1.00
1899-1899	1	18.45	1.00	1.00
1890-1899	10	18.45	1.00	1.00
1891-1899	9	18.45	1.00	1.00
1892-1899	8	18.45	1.00	1.00
1893-1899	7	18.45	1.00	1.00
1894-1899	6	18.45	1.00	1.00
1895-1899	5	18.45	1.00	1.00
1896-1899	4	18.45	1.00	1.00
1897-1899	3	18.45	1.00	1.00
1898-1899	2	18.45	1.00	1.00
1899-1899	1	18.45	1.00	1.00
1890-1899	10	18.45	1.00	1.00
1891-1899	9	18.45	1.00	1.00
1892-1899	8	18.45	1.00	1.00
1893-1899	7	18.45	1.00	1.00
1894-1899	6	18.45	1.00	1.00
1895-1899	5	18.45	1.00	1.00
1896-1899	4	18.45	1.00	1.00
1897-1899	3	18.45	1.00	1.00
1898-1899	2	18.45	1.00	1.00
1899-1899	1	18.45	1.00	1.00
1890-1899	10	18.45	1.00	1.00
1891-1899	9	18.45	1.00	1.00
1892-1899	8	18.45	1.00	1.00
1893-1899	7	18.45	1.00	1.00
1894-1899	6	18.45	1.00	1.00
1895-1899	5	18.45	1.00	1.00
1896-1899	4	18.45	1.00	1.00
1897-1899	3	18.45	1.00	1.00
1898-1899	2	18.45	1.00	1.00
1899-1899	1	18.45	1.00	1.00
1890-1899	10	18.45	1.00	1.00
1891-1899	9	18.45	1.00	1.00
1892-1899	8	18.45	1.00	1.00
1893-1899	7	18.45	1.00	1.00
1894-1899	6	18.45	1.00	1.00
1895-1899	5	18.45	1.00	1.00
1896-1899	4	18.45	1.00	1.00
1897-1899	3	18.45	1.00	1.00
1898-1899	2	18.45	1.00	1.00
1899-1899	1	18.45	1.00	1.00
1890-1899	10	18.45	1.00	1.00
1891-1899	9	18.45	1.00	1.00
1892-1899	8	18.45	1.00	1.00
1893-1899	7	18.45	1.00	1.00
1894-1899	6	18.45	1.00	1.00
1895-1899	5	18.45	1.00	1.00
1896-1899	4	18.45	1.00	1.00
1897-1899	3	18.45	1.00	1.00
1898-1899	2	18.45	1.00	1.00
1899-1899	1	18.45	1.00	1.00
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1894-1899	6	18.45	1.00	1.00
1895-1899	5	18.45	1.00	1.00
1896-1899	4	18.45	1.00	1.00
1897-1899	3	18.45	1.00	1.00
1898-1899	2	18.45	1.00	1.00
1899-1899	1	18.45	1.00	1.00
1890-1899	10	18.45	1.00	1.00
1891-1899	9	18.45	1.00	1.00
1892-1899	8	18.45	1.00	1.00
1893-1899	7	18.45	1.00	1.00
1894-1899	6	18.45	1.00	1.00
1895-1899	5	18.45	1.00	1.00
1896-1899	4			